# UTAH DEPARTMENT OF NATURAL RESOURCES Utah Geological and Mineral Survey 606 Black Hawk Way Charles Control Control Charles Control Co

# ROCKHOUND GUIDE TO SELECTED ROCK AND MINERAL LOCALITIES IN UTAH

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by Greg McLaughlin



#### HELP FOR THE ROCK AND MINERAL COLLECTOR...

# WHERE TO COLLECT ROCKS AND MINERALS IN UTAH

Most of the localities described in this flyer are on Federal or State land and may be visited without special permission. For all other areas it is essential to determine the ownership of the land before starting to collect rocks or minerals. Land ownership maps can be obtained from one of the five Bureau of Land Management district offices listed under Federal Agencies.

In general, rockhounds and mineral collectors may collect small amounts of rocks and minerals from unrestricted federal and state land in Utah without obtaining a special permit if collection is made for personal, non-commercial purposes. Collection of large quantities or for commercial purposes requires a permit, lease, or license from the agencies administering the land on which the collection is made.

#### PRIVATE LAND

On private land or land encumbered by mining claims, the collector must get the permission of the owner before removing rocks, minerals, or other materials. Collectors may use the surface of mining claims for recreation or access to adjoining property providing that their actions do not endanger or materially interfere with prospecting or mining activities.

## RESTRICTED LANDS

Collecting of any minerals is prohibited on certain lands, including tribal lands, military reserves, national parks, national monuments, national recreation areas, state parks, Bureau of Land Management recreation sites, recreation areas developed by local governmental units and organizations where such lands were acquired under the State Recreation and Public Purposes Act, and officially designated wilderness areas. No artifacts or fossils may be collected on State-owned lands without a permit. Permits can be obtained from the Utah Division of State History, see listing under State Agencies.

# WHERE TO FIND MAPS AND OTHER INFORMATION

#### Federal Agencies

The United States Geological Survey's Public Inquiries Office at 125 South State Street, Salt Lake City, Utah 84138, phone 801-524-5652, sells topographic and geologic maps as well as reports on the geology and mining districts of Utah.

The United States Bureau of Land Management has offices at:

- 324 South State Street, Salt Lake City, Utah 84111-2303, phone 801-524-5330.
- 170 South 500 East, Vernal, Utah 84078, phone 801-789-1362.
- P.O. Box 729, Cedar City, Utah 84720, phone 801-586-2401.
- P.O. Box 768, Richfield, Utah 84701, phone 801-896-8221.
- P.O. Box 970, Moab, Utah 84532, phone 801-259-6111.

The Utah State Coordinator for the National Park Service is at Canyonlands National Park, 125 West 200 South, Moab, Utah 84532, phone 801-259-7164.

The Recreation Information office of the United States Forest Service, 125 South State Street, Salt Lake City, Utah 84111, phone 801-942-4059, provides information about roads and facilities in National Forests.

#### State Agencies

The Utah Geological and Mineral Survey, 606 Black Hawk Way, Salt Lake City, Utah 84108, phone 801-581-6831, sells geologic maps and geologic reports of many parts of the state.

The Utah Division of Parks and Recreation, 1636 West North Temple, Room 116, Salt Lake City, Utah 84165, phone 801-533-6012, and the Utah Travel Council, Council Hall, Capitol Hill, Salt Lake City, Utah 84114, phone 801-533-5681, can provide maps and information about state parks and places of interest in the state.

The Utah Division of State History, 300 Rio Grande Street, Salt Lake City, Utah 84101, phone 801-533-4563,

answers

questions about fossils, petrified wood, and Indian artifacts as well as the history of Utah. It also provides permits for hunting fossils on state land.



#### ROCKHOUND, GEM AND MINERAL CLUBS IN UTAH, 1987

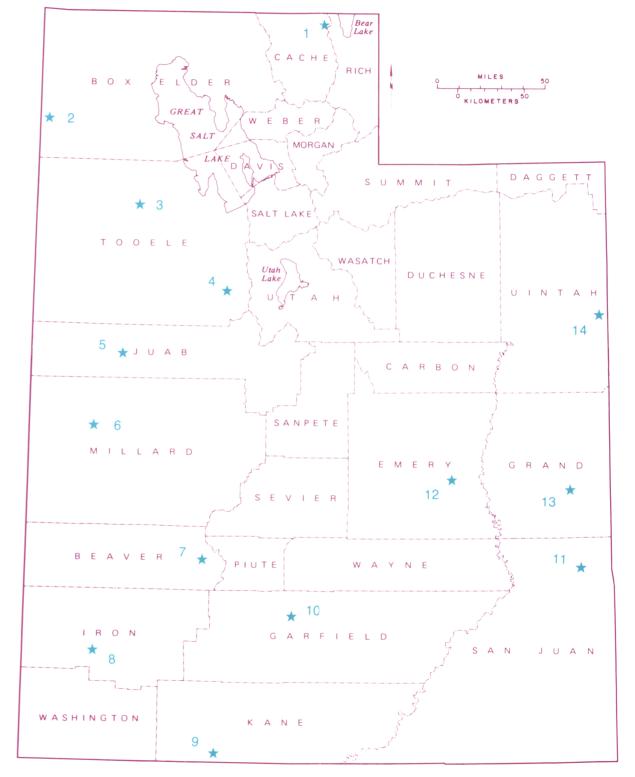
- Golden Spike Gem and Mineral Society, c/o Dale A. Leatham, President, 2687 North 200 East, North Ogden, Utah 84404. Meets 3rd Wednesday of each month, 7:30 pm, except August and December, Golden Hours Center, 650-25th Street, Ogden, Utah.
- Mineral Collectors of Utah, c/o Phil Richardson, President, 1415 East Murphy Lane, Salt Lake City, Utah 84106. Publishes bi-monthly newsletter, *Crystalith*.
- Mineralogical Society of Utah, Jim Fields, President, 2048 Susan Way, Salt Lake City, Utah 84121. Meets 2nd Friday, 7:30 pm, Room 102, Business Lecture Building, University of Utah. Publishes monthly newsletter, *Mineral-scoop*. Visitors welcome.
- Timpanogos Gem and Mineral Society, P.O. Box 65, Provo, Utah 84601. Meets 7:30 pm last Thursday, Orem City Center, Orem, Utah.
- Utah State Federation of Gem and Mineralogical Societies, c/o Jim Bean, President, 213 East Leslie Avenue, Salt Lake City, Utah 84115. This organization handles all of the leases of special collecting areas owned by the various clubs. Permission must be obtained from the Federation before collecting at the Topaz Mountain amphitheater in Juab County (Location No. 5).
- Wasatch Gem Society, c/o Dell E. Beckstead, President, 1887 West 11800 South, Riverton, Utah 84065. Meets 2nd Monday, 7:30 pm, Senior Citizens Recreation Center, 237 South 1000 East, Salt Lake City, Utah.
- Francis Peak Gem and Mineral Society, c/o Marvin Sandmire, 120 East 1000 North, Centerville Utah 84014.
   Meets first Tuesday, 7:30 pm at Layton VFW Lodge, 1389 N. Main, Layton, Utah.

The members of the rockhound clubs listed above have offered to answer questions about access to collecting areas in their vicinity, road conditions, and the best places to go.

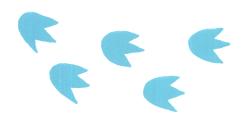
#### RECOMMENDED READING

- Bullock, K.C., 1981, *Minerals and Mineral Localities of Utah*: Utah Geological and Mineral Survey Bulletin 116, lists minerals, mining districts, and mines; has map showing the locations of Utah's mining districts.
- Butler, B.S., and others, 1920, *The Ore Deposits of Utah:*United States Geological Survey Professional Paper 111, descriptions of mineral deposits known before 1920. These include most of the mining districts.
- Johnson, Cy, 1976, Western Gem Hunter's Atlas: Cy Johnson and Son, Box 288, 435 North Roop Street, Susanville, CA 96130. Atlas of maps showing locations of hunting areas.
- Palache, Charles, 1934, *Minerals from Topaz Mountain, Utah:* American Mineralogist, v. 10, no. 1, p. 14-15.
- Pough, F.H., 1976, *Field Guide to Rocks and Minerals:* 4th edition, Houghton Mifflin, Boston, MA.
- Simpson, Bessie W., 1978, *Utah Gem Trails:* 2nd revised edition, Gem Trail Publications, P.O. Box 157, Glenrose, TX76043.
- Sinkankas, John, 1959, *Gemstones of America:* D. Van Nostrand Co., Inc., Princeton, NJ.
- Stokes, W.L., 1986, *The Geology of Utah:* Utah Geological and Mineral Survey, Salt Lake City, UT.
- Stowe, C.H., 1979, *Rockhound Guide to Mineral and Fossil Localities in Utah:* Utah Geological and Mineral Survey Circular 67 (out of print but available in libraries).
- Utah Geological and Mineral Survey Bulletin 73, 1963, Mineral and Water Resources of Utah: includes maps showing mineralized areas, gives brief production history, geological environment of each.





MAP OF UTAH SHOWING LOCATIONS OF ROCK AND MINERAL COLLECTING AREAS BY CORRESPONDING NUMBERS DESCRIBED ON THE BACK OF THIS BROCHURE.



#### NO. 1: AMAZON HOLLOW AREA, CACHE COUNTY

How to Get There: Drive 8 miles west of Garden City on U.S. Highway 89 to the vicinity of Willow Springs where a dirt road leads south into Amazon Hollow.

*Other Information:* Amazon Hollow is on the west side of Bear Lake, at an elevation of 7,530 feet. Lead-silver-copper ore was produced in the area in the early 1900s. Jeep trails are scattered through Amazon Hollow.

Maps: Ogden Army Map Service Topographic Map; Garden City U.S. Geological Survey Topographic Map.

Sources: Williams, J.S., 1958, Geologic Atlas of Utah, Cache County: Utah Geological and Mineral Survey Bulletin 64, 98 p. Golden Spike Gem and Mineral Society members.

Land Ownership: Cache National Forest.

Minerals: Copper, lead and zinc minerals: galena, cerussite, smithsonite, sphalerite, malachite, azurite; barite, calcite, dolomite.

#### NO. 2: LUCIN DISTRICT, BOX ELDER COUNTY

How to Get There: Located along western boundary of Box Elder County, straddles Utah-Nevada state line in the northern half of the Pilot Range 35 miles north of Wendover, Utah and 12 miles east of Montello, Nevada. Accessible by Utah Highway 30 northwest of Wendover; secondary road leads north of Wendover through the Desert Range.

Other Information: Several old mines are situated in the area around Regulator Canyon, including the Black Warrior, Copper Mountain Mines, Mineral Mountain Mines, Tecoma Hill Mines, Walker Tunnel and others. Mineralization was discovered in 1868. Between 1886 and 1894 mines were active. Look on old mine dumps for mineral specimens.

Maps: Brigham City Army Map Service Topographic Map; Patterson Pass U.S. Geological Survey Topographic Map.

Sources: Butler, B.S., and others, 1920, The Ore Deposits of Utah, U.S. Geological Survey Professional Paper 111. Doelling, H.H., 1980, Geology and Mineral Resources of Box Elder County: Utah Geological and Mineral Survey Bulletin 115, p. 86-122.

Land Ownership: BLM Public Lands.

*Minerals:* Copper, lead, and zinc minerals, limonite, goethite, jarosite, hematite, native silver, calcite, alunite.

#### NO. 3: KNOLLS, TOOELE COUNTY

How to Get There: Travel west from Salt Lake City on North Temple (I-80) some 80 miles to the Knolls exit. Get on the old highway just south of the freeway. The dunes can be found on both sides of the road in this vicinity.

Other Information: The climate is hot and dry during summer and cold during the winter. Winds are usually blowing. The dunes are composed of lightly compacted gypsum sand containing some oolites.

Maps: Tooele Army Map Service Topographic Map.

Sources: Eardley, A.J., Gypsum Dunes and Evaporation History of the Great Salt Lake Desert; Utah Geological Survey, Special Studies No. 2, 1962, 27 p. (out of print, but available in libraries). Gwynn, J.W., Utah Geological and Mineral Survey Geologist. Utah Geological and Mineral Survey Bulletin 73, 1963, Mineral and Water Resources of Utah, p. 185.

Land Ownership: BLM public lands, private and state lands.

Minerals: Gypsum sand.

### NO. 4: NEAR VERNON, IN SOUTHERN RUSH VALLEY, NORTH NORTH OF DUNBAR STATION, TOOELE COUNTY

How to Get There: Drive south from Tooele for 37 miles to Vernon. Continue southeast 4.5 miles to the road that turns north along west side of railroad. Highway is paved to railroad crossing; then becomes a single-track dirt road. Wonderstone is found in hills to north. Watch for and avoid staked claims.

Maps: Tooele Army Map Service Topographic Map; Vernon U.S. Geological Survey Topographical Map.

Source: Walter Elieson, President, Mineralogical Society of Utah, 1976.

Land Ownership: BLM Public lands and private claims.

*Minerals:* Wonderstone (picturestone). Specimens of volcanic rock, light grey, pink, and maroon.

## NO. 5: TOPAZ AND SPOR MOUNTAIN AREA, THOMAS RANGE, JUAB COUNTY

How to Get There: Drive to approximately 5 miles southwest of Lynndyl on U.S. Highway 6, to the Brush Wellman beryllium plant. Turn west and proceed about 37 miles on a hard-surfaced road to a sign on the north side which points to Topaz Mountain. Turn and proceed north and then west into a "cove" at the base of the mountains.

Other Information: Topaz crystals are scattered in the sand and on the hillsides. These will be water-white, bleached by the sun. They can be located by looking for a bright reflection. The angle of the morning or afternoon sun makes them easy to find. However, most of the topaz are somewhat of a poor quality. Before they are exposed to sunlight, the crystals are a light amber color. Unexposed specimens are found in pockets in the white rocks; it may be necessary to break open rocks to expose pockets. Less common are:

Red beryl: Found in cavities at Topaz Mountain, is imperfectly shaped six-sided crystals ¼ inch across. No large, faceting size stones have been found at Topaz Mountain to date, but it is possible that some may be found in the future.

Pseudobrookite: Forms in needlelike clusters up to  $\frac{1}{2}$  inch in length and has a black color. Very rare, it is highly prized by mineral collectors

Bixbyite: A very rare oxide of iron and manganese with only a trace of iron. It has a beautiful black metallic luster and occurs in shiny cubes (¼ inch) which look as though they have the corners sliced off. Topaz Mountain is the locality where it was first identified and named for Maynard Bixby of Salt Lake City.

Spessartite Garnet: The garnet which is found at Topaz Mountain is one of the rarer varieties. It is a deep reddish-brown color and is often found in clusters. It is easily recognizable by its color and its 12-sided dodecahedral form. It is found in a number of places throughout the Thomas Range

Maps: Delta Army Map Service Topographic Map. Topaz Mountain U.S. Geological Survey Topographic Map.

Sources: Walter Elieson, President, Mineralogical Society of Utah. Brunson, RuJean R., Editor, Mineralogical Society of Utah: reprinted from the "Bulletin of the Mineralogical Society of Utah". v. 14, no. 5, 1977. Palache, Charles, 1934, Minerals from Topaz Mountain, Utah: American Mineralogist, v. 10, no. 1.

Land Ownership: BLM public land, state land, private land. The main collecting area in the cove is leased by the Utah State Federation of Gem and Mineralogical Society to maintain the area for collectors. Check with the Federation (address under "Rockhound Clubs").

Minerals: Topaz, garnets, red beryl, bixbyite, pseudobrookite.

#### NO. 6: PAINTER SPRINGS AREA, MILLARD COUNTY

How to Get There: Drive west from Delta on U.S. Highway 6-50 to milepost 34 (approximately 37 miles), continue west for .9 mile to a junction marked with a sign "Painter Springs, 10 miles." Turn north on gravel road, drive 9.4 miles to a junction; a water tank can be seen on the west side of the road at this point. Turn to the east and continue past the water tank on the south side of the road. Painter Springs camping area is 1.8 miles from the last junction.

Other Information: Collecting is suggested along the edge of the intrusive. Typical skarn-type minerals can be found in this area. In the interior of the intrusive, orthoclase crystals can be found up to 2" long. These crystals are not abundant; will require some walking and a great deal of searching.

*Maps:* Delta Army Map Service Topographic Map. Notch Peak U.S. Geological Survey Topographic Map.

Source: Various gem collectors.

Land Ownership: BLM public lands.

Minerals: Garnet, orthoclase, and other minerals.

#### NO. 7: SHEEPROCK CANYON, BEAVER COUNTY

How to Get There: The Sheeprock Canyon area of the Newton mining district is in the Tushar Mountains approximately 10 miles north-northeast of Beaver. Several roads lead into this region. Best access is U.S. Highway 91 north of Beaver for 7 miles where an unimproved road leads to the northeast to the Indian Creek area. Follow this road in a north, east, and then southerly direction for a little more than 4.5 miles where it forks. Take the southeast road to the left which leads to the Sheeprock Canyon area, about 2.5 to 3 miles.

Other Information: The alunite deposit lies at the west base of the mountain occupying a hill some 350' above the alluvial slope. The Sheeprock gold mine is to the northeast, the Rob Roy gold mine to the north. Several other old mines are in the vicinity.

Maps: Richfield, Army Map Service Topographic Map; Beaver U.S. Geological Survey Topographic Map.

Source: Callaghan, Eugene, 1973, Mineral Resource Potential of Piute County, Utah and adjoining area: Utah Geological and Mineral Survey Bulletin 102, 135 p.

Land Ownership: National Forest lands (Fishlake National Forest).

*Minerals:* Alunite. Other minerals found in the area include amethyst, argentite, calcite, cerargyrite, fluorite, limonite, pyrite, sericite, tellurium minerals and quartz.



#### NO. 8: COLUMBIA MINE, IRON COUNTY

How to Get There: Take U.S. Highway 56 west from Cedar City for 20 miles to a road that turns right to the mine dumps which can be seen from the highway.

Other Information: Magnetite occurs as octahedrons up to 2 cm in vugs in magnetite in the iron mines west of Cedar City. Collecting on the dumps is allowed where not fenced off. Associated with the magnetite are siderite as rhombohedrons and sphene to .5 cm, calcite as curved rhombohedrons to .5 cm, and apatite as light-green prisms to 1 cm. White pseudomorphs, of unknown composition, of the apatite can also be found.

Maps: Cedar City Army Map Service Topographic Map. Desert Mound U.S. Geological Survey Topographic Map.

Source: Ream, L.R., 1977 (February), BLM, Cedar City.

Land Ownership: Private and BLM Public lands. Collecting permitted; use care. *Minerals:* Iron minerals, siderite, calcite, apatite.

#### NO. 9: RED CLIFFS, KANE COUNTY

How to Get There: Drive approximately 15.7 miles east of Kanab on U.S. Highway 89, take gravel road to north to Vermillion Cliffs region and Seaman Wash. Red Cliffs are located 4 to 6 miles from turnoff at Highway 89.

Other Information: Several gates —leave them open or closed as you find them. Agate is found in Red Cliffs and surrounding washes.

Maps: Cedar City Army Map Service Topographic Map. Buckskin Gulch U.S. Geological Survey Topographic Map.

Source: Mineralogical Society of Utah member.

Land Ownership: BLM public lands.

Minerals: Agate, jasper.



#### NO. 10: BLUE SPRUCE CAMPGROUND, GARFIELD COUNTY

How to Get There: Take paved road north out of Escalante (near school building) and across Escalante River. Some agates may be found near the right side of the fence and cattle guard. Follow signs to Blue Spruce Campground 19 miles to the north, on the left side of road. Jasper is found scattered over a large area in the mountain gullies about .5 mile from the campground.

Other Information: From the campground you can drive easterly approximately 5.5 miles; agates can be found in pockets in the soil or scattered along both sides of the road to where it joins highway 12 west of Boulder.

*Maps:* Escalante Army Map Service Topographic Map. Escalante U.S. Geological Survey Topographic Map.

Sources: Mineralogical Society of Utah members and from Forest Ranger.

Land Ownership: Escalante District, Dixie National Forest. The Escalante Petrified Forest, State Reserve is located at Escalante. No collecting is allowed in State Park, but trails are well worth exploring.

Minerals: Agate, jasper

#### NO. 11: JOE WILSON WASH, SAN JUAN

How to Get There: (Section 22, T29S, R23E) Starting at LaSal Junction, drive south 4.1 miles on U.S, Highway 163 from LaSal Junction to Joe Wilson wash. Joe Wilson wash approaches the highway from the northeast and crosses under it and continues to the west. Park at the crossing of the wash and the highway and walk up the wash for approximately .25 mile. Agate is found in the bottom of the wash.

Other Information: Large pieces can be found in the bottom of the wash. The area can be traveled in a passenger car.

Maps: Moab Army Map Service Topographic Map. LaSal Junction U.S. Geological Survey Topographic Map.

Sources: Perry, L.I., UGMS Geologists. Land Ownership: BLM public lands.

Minerals: Agate

#### NO. 12: EMERY COUNTY

How to Get There: Eleven miles west of Green River on Interstate 70 take Utah State Highway 24 south toward Hanksville. Just off the junction road on west side is a good "grape" agate hunting area. Some 4.2 miles south before crossing river, a road to the east for 1 mile will take you into agate area in the hills.

Other Information: Agate is locally called "grape" agate; pieces have bubblelike protrusions on outside.

Maps: Salina Army Map Service Topographic Map. Green River U.S. Geological Survey Topographic Map.

Source: Mineralogical Society of Utah members.

Land Ownership: BLM public lands.

Minerals: Agate.

NO. 13: HOTEL MESA AREA, GRAND COUNTY

How to Get There: Take Utah State Highway 128 east from Moab. Proceed for 3 miles after crossing the Colorado River until you see some buildings on the right side of the road. The mountain on the west side has several areas where large amounts of colorful agates can be found.

Other Information: Southwest of the "Hotel Mesa" area, a paved road most of the way to the bridge and a graded road from there to Cisco can be traveled easily in a passenger car.

Maps: Moab Army Map Service Topographic Map. Cisco U.S. Geological Survey Topographic Map.

Source: Mineralogical Society of Utah, December 1976.

Land Ownership: BLM public lands. Minerals: Agate.

#### NO. 14: HELLS HOLE CANYON, UINTAH COUNTY

How to Get There: Small tributary to Hell's Hole Canyon, in Section 20, (principally) and 17, T10S, R25E, Uintah County, Utah. Take Utah State Highway 45 south from Bonanza approximately 3.5 miles to a bridge crossing White River; proceed on 45 and 207. Turn left (east) on primitive road past corrals, approximately 0.8 mile down canyon to outcrop of the Mahogany Zone of the Parachute Creek Member of the Green River Formation (oil shale horizon).

Other Information: Dirt road south of Bonanza, periodically graded. Can be dangerous during and immediately following thunderstorms.

 ${\it Maps:} \ {\it Grand Junction Army Map Service Topographic Map. Weaver Ridge, U.S.} \ {\it Geological Survey Topographic Map.}$ 

Sources: Campbell, J., UGMS Geologists; Cashion, W.B., 1967, Geology and fuel resources of the Green River Formation, southeastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Professional Paper 548.

Land Ownership: BLM public lands and state-owned lands.

Minerals: Hydrocarbons (oil-impregnated rock).

